

Product characteristics

Description

Hempatex HI-Build 46410 is a physically drying, high-build coating with good colour retention as a flat finish. The product is based on acrylic resin and non-chlorinated plasticizer. Contains zinc phosphate. The product is resistant to salt water, splashes of aliphatic hydrocarbons, animal and vegetable oils.

Recommended use

Hempatex HI-Build 46410 is recommended as a primer, intermediate or finishing coat in Hempatex-systems in moderate corrosive environments. The product is suitable as a self-priming repair and touch-up coating for containers as well as other cases where a fast and economic repair job is desired. Can also be used as a finishing coat for containers.

Service temperature:

- Maximum, dry exposure only: 80°C [176°F].

Certificates / Approvals

- EC-type examined as a low flame spread material when used as part of a predefined paint system. Please refer to "Declaration of Conformity" on hempel.com for further details.
- Complies with US FDA and EU food regulations for contact with dry foodstuff. Consult Hempel for details.

Features

- Physically drying.
- Good colour retention.
- Resistant to salt water, splashes of aliphatic hydrocarbons, animal and vegetable oils.

Product safety

Flash point 26°C [79°F]

VOC content

Legislation	Value
EU	513 g/L [4.28 lb/US gal]
US (coatings)	513 g/L [4.28 lb/US gal]
US (regulatory)	513 g/L [4.28 lb/US gal]
China	513 g/L [4.28 lb/US gal]

According to specific legislation, see details in the Explanatory Notes available at Hempel website, hempel.com or at your local Hempel website. VOC values may vary with shade, please consult the Safety Data Sheet, section 9.

Handling

Handle with care. Before and during use, observe safety labels on packaging and paint containers and follow all local and national safety regulations. Always consult Hempel's Safety Data Sheet for this product along with the Product Data Sheet.

For professional use only.

Product data

Product code 46410

Standard shade* / code Grey 11480 **

Gloss Flat

Volume solids 42 ± 2%

Specific gravity 1.2 kg/L [10 lb/US gal]

Reference dry film thickness 100 micron [3.9 mils]

* Wide range of colours is available via Hempel's Multi-Tint® system.

** Colour stability may be affected by exposure to harsh chemical and/or high temperatures.



Aluminium shade / code Aluminium grey 19000

Gloss

Please consult Hempel's Guideline on aluminium pigmented coatings.

Volume solids 40 ± 2%

Specific gravity 1.2 kg/L [10 lb/US gal]

Reference dry film thickness 100 micron [3.9 mils]

Surface preparation

Cleanliness

- Remove oil, grease and other contaminants by suitable detergent cleaning.
- Remove salts, detergents and other contaminants by high pressure fresh water cleaning.

New build:

- Abrasive blasting to min. Sa 21/2 (ISO 8501-1) / SP 10 (SSPC).
- Remove dust, blast media and loose materials.

Maintenance and Repair

- Spot abrasive blasting to min. PSa 2 (ISO 8501-2) / SP 6 (SSPC).
- Minor areas may be hand or power tool cleaned instead of abrasive blasting.
- Remove dust, blast media and loose materials.

Consult Hempel's separate Surface Preparation Guidelines for more details.

Application

Mixing ratio Stir well before use.

Thinner Hempel's Thinner 08080

Cleaner Hempel's Thinner 08080

Application method

ΤοοΙ	Thinning max vol.	Application parameters
Airless spray	5%	Nozzle pressure: 175 bar [2500 psi] Nozzle orifice: 0.017-0.021"
Air spray	15%	Not Applicable.
Brush	5%	Not Applicable.

If brush or roller application is used, more coats will be necessary to achieve the specified dry film thickness. Spray data are indicative and subject to adjustment. Pressure is for a material temperature of 20°C [68°F].

Film thickness

Specification range Low		High	Recommended	
Dry film thickness	50 micron	125 micron	100 micron	
	[2.0 mils]	[4.9 mils]	[3.9 mils]	
Wet film thickness	120 micron	300 micron	230 micron	
	[5 mils]	[12 mils]	[9 mils]	
Theoretical spreading rate	8.3 m²/L	3.3 m²/L	4.2 m²/L	
	[340 sq ft/US	[130 sq ft/US	[170 sq ft/US	
	gal]	gal]	gal]	

Product may be specified in another film thickness than indicated depending on purpose and area of use. This will alter spreading rate, drying and curing time and overcoating interval. For best performance, avoid excessive film thickness.

Application conditions

- To avoid condensation, apply on a clean and dry surface with a temperature that is at least 3°C [5°F] above the dew point.



Application remarks

- Two coats of the topcoat may be necessary to obtain full hiding power.

Drying and overcoating

Product compatibility

- Previous coat: None or according to Hempel's specification.
- Subsequent coat: None or according to Hempel's specification.

Drying time

Surface temperature		-10°C [14°F]	0°C [32°F]	20°C [68°F]	40°C [104°F]
Surface dry	hours	21⁄2	1½	3⁄4	1⁄2
Hard dry	hours	9	41⁄2	11⁄2	1

Determined for dry film thickness 100 micron [3.9 mils] at standard conditions, see Hempel's Explanatory Notes for details.

Overcoating

Hempel's specification supersedes any guidelines indicated in the overcoating table

Quality name		-10°C [14°F]	0°C [32°F]	20°C [68°F]	30°C [86°F]
Atmospheric medium					
Hempatex HI- Build 46410	Min Max	26 h Ext*	12 h Ext	4 h Ext	3 h Ext

Overcoating times are indicative for products of the same generic chemistry. Consult Hempel's specification for more information.

Drying conditions

- To obtain the drying time stated, it is important to maintain sufficient ventilation during application, drying and curing.

Overcoating details

- The surface must be dry and clean prior to application.

Other remarks

- Hempatex qualities are thermoplastic, therefore prolonged direct pressure at temperatures above 40°C [104°F] may cause film indentations.
- Hempel's Specification supersedes any recommendations given in the Product Data Sheets.

Storage

Shelf life

Ambient	25°C
temperature	[77°F]
Product	60 months

Shelf life from date of production, when stored in original, unopened containers. Thereafter, the product quality must be re-inspected. Storage at elevated temperatures may reduce shelf life. For advice, please consult Hempel.

Storage conditions

 Product must be stored according to local legislation, at maximum 40°C [104°F], without direct sunlight and protected from rain and snow.

Carbon Footprint

Dry film thickness	1 µm	1 mil
GWP (Global Warming Potential)	9.2 g CO ₂ e/m ²	0.048 lb CO2e/ft ²

The carbon footprint is for 1 square meter / square foot of surface area with a dry film thickness of 1 micron / mil.

The scope includes raw materials, in-bound transport to the Hempel factory, Hempel manufacturing processes, and any Volatile Organic Compounds emitted during and after the application of the product.

It is calculated based on the standard shade defined in this PDS. Values may vary with shade.



Additional documents

Additional information is available at the Hempel website https://www.hempel.com/service-and-support/technical-guidelines or at your local Hempel website:

- Explanatory Notes for Product Data Sheet.
- Application methods.
- Surface Preparation.
- Application Instruction for this product.

This Product Data Sheet ("PDS") relates to the supplied product ("Product") and is subject to updating from time-to-time. Accordingly, the buyer/applicator should have regard to the PDS supplied together with the relevant batch of the Product (and not an earlier version). In addition to the PDS, the buyer/applicator may receive some or all of the following specifications, statements and/or guidelines as listed below or as are available from the Hempel website under 'Products' at www.hempel.com (the "Additional documents"):

No.	Document description	Location/comments
1.	Technical Statement	One-off specific advice provided on request for specific projects
2.	Specification	Only issued for specific projects
3.	PDS	This document
4.	Explanatory Notes to the PDS	Available at www.hempel.com and contain relevant information about the Product testing parameters
5.	Application Instruction	Where available, at www.hempel.com
6.	Generic technical guidelines (e.g. on application and surface preparation)	Where available, at www.hempel.com

In the event of a conflict of information between the PDS and the Additional documents, the order of priority of information shall be in the order as set out above. In such event you should also contact your representative at Hempel for clarification. Furthermore, the buyer/applicator must have full regard to the relevant Safety Data Sheet provided with each Product and which can also be downloaded from www.hempel.com.

Hempel shall not be liable for defects where the application of the Product has not been made fully in accordance with the recommendations and requirements set out in the relevant PDS and the Additional Documents. The information and terms of this disclaimer apply to this PDS, the Additional documents and any other documents supplied by Hempel in respect of the Product. In addition, the Product is supplied and all technical assistance is given subject to Hempel's General Conditions of Sale, Delivery and Service, unless otherwise expressly agreed in writing.